

Surface Mount GPS Antenna (Pat.Pnd.) GSM/CDMA, WiFi, 4.9 Public Safety & GPS



MultiBand with GPS
4 separate coaxes

- Mounts easily to roof, trunk or bulkhead
- MultiBand covers frequency systems from 800 MHz - 2.7 GHz & Public Safety 4.9 GHz
- 3 RF coax feeds for radio comm channels & separate feed for GPS receiver
- High performance GPS with 26 dB amplifier

For Public Safety groups this is the latest generation of multiband antenna. This model provides high performance GSM/CDMA, 2.4 WiFi, and a new combined 2.4/4.9-6 GHz, along with GPS. With three separate RF feeds the latest services for Public Safety can be offered, providing interoperability. The antennas can be mounted to any type of vehicle or mobile command post.

The design uses a 3/4" feed thru (19 mm) for securing to the vehicle. Access to the underside of the body surface is required to complete the installation. Note, for best performance, the antenna should be mounted on a metal surface/groundplane. For GPS, the antennas are typically outfitted with 15 feet (4.5 meters) of RG-174 cable.

The communications channel cables are 15 feet of low loss RF-195 (4.5 meters). All connectors are male unless requested otherwise. Please consult factory for special lengths or connectors.

GPS performance is 26 dB, with 5 dBi antenna gain. The GPS circuit has a low noise figure (2.0 dB max) with excellent filter characteristics.

The antennas are enclosed in a 4.2"D x 3.2"H weather-proof ASA radome (107 mm x 81 mm), and supplied with all mounting hardware and sealing gasket. The radome color is white, with optional black.

Antenna Model Configurator		SMW- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> example - SMW-402-3A3A3A2C									
Combo Configuration		800 -2.7 GHz Interface		2.4-2.5 GHz Interface		2.4/4.9-6 GHz Interface		GPS Interface			
Code	Description	Code	Description	Code	Description	Code	Description	Code	Description		
402	Cbl1=800-2.7 GHz	3A	RF-195/TNC	3A	RF-195/TNC	3A	RF-195/TNC	2C	RG-174/SMA		
	Cbl2=2.4-2.5 GHz	3B	RF-195 /MiniUHF	3B	RF-195/MiniUHF	3B	RF-195/MiniUHF	2D	RG-174/SMB		
	Cbl3=2.4/4.9-6 GHz	3C	RF-195/SMA	3C	RF-195/SMA	3C	RF-195/SMA	2E	RG-174/MCX		
	Cbl4=GPS	3H	RF-195/Fakra	3J	RF-195/RevPol SMA	3J	RF-195/RevPol SMA	2F	RG-174/MMCX		
		3K	RF-195/RevPol TNC	3K	RF-195/RevPol TNC	3K	RF-195/RevPol TNC	2H	RG-174/Fakra		
		3L	RF-195/SMC					2L	RG-174/SMC		

Specifications

Frequency:

Cable#1	806 - 960/1710-2700 MHz
Cable#2	2400 - 2485 MHz
Cable #3	2.4-2.5/4.9 - 6.0 GHz
Cable #4	GPS, 1575.42 +/- 2 MHz

Band/Channel Gain:

800-1GHz	2 dBi
1.7 - 6 GHz	5 dBi (peak)

GPS Gain:

26 dB, 5 dBi Antenna

VSWR:

2:1 max over range

Noise Figure:

2.0 dB max, 1.7 dB typical

Operating Temp:

-40° to +85° C

Nominal Impedance:

50 ohms

Amplifier Bias:

3.3 or 5 VDC +/- 10%

Maximum Power:

800 - 1900 MHz	20 Watts
1900 - 6000 MHz	10 Watts

Current:

20 mA max, 10 mA typical

Cable:

GPS	RG-174, 15 ft (4.5 meters)
Cables #1 - #3	Separate RF-195 Cables, 15 ft (4.5 meters)

Case:

4.2"D x 3.2 "H (107 mm x 81 mm)

Case Material:

White ASA, black optional (ABS)

Mounting:

3/4" dia. x 3/8" long(19 mm x 9mm) for 1/4" thick (6 mm) metal

Hardware:

Nut and gasket included

Custom configurations available, please consult factory.